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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,192	10/27/2003	Peter Tiemann	2000P20254WOUS	3873

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SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPT.
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

KIM, TAE JUN

ART UNIT PAPER NUMBER

3746

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,192

Applicant(s)

TIEMANN, PETER

Examiner

Ted Kim

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-44 is/are pending in the application.
- 4a) Of the above claim(s) 38-40 and 42-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-37 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/27/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of species I in the reply filed on 6/29/05 is acknowledged.
2. Claims 38-40, 42-44 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/29/05.

Priority

3. This application repeats a substantial portion of prior Application No. PCT/EP02/04540 and has additional disclosure not presented in the prior application (Figure 9, as admitted by applicant on 10/27/2003). Applicant is required to clarify whether this omission in the PCT application was inadvertent by the PCT examining office or by applicant. Otherwise, since this application names an inventor or inventors named in the prior application, it may constitute a continuation-in-part of the prior application. Should applicant desire to obtain the benefit of the filing date of the prior application, attention is directed to 35 U.S.C. 120 and 37 CFR 1.78.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 26-28, 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Regarding claim 26, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.
7. Regarding claim 31, "*the end* adjoining the wall structure [to what???" is unclear because "the end" lacks proper antecedent basis and it is unclear what applicant regards the adjoining to.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 25, 29, 30, 41 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 896193. EP '193 teaches a combustion chamber comprising: an outer wall structure 32 surrounding an internal area; a cooling air inlet orifice 42 arranged on the outer wall structure for cooling air near a hot gas outlet orifice 16, the cooling air inlet orifice opening into a cooling air channel 40; a burner 14 projecting into the internal area; a housing 21 extending from the burner to the hot gas outlet orifice; an inner wall offset from the outer wall structure 32, the inner wall formed by a surface of the housing and

cooled by convection by an air stream flowing between the outer wall structure and the inner wall, the air stream being conducted in a closed cooling air channel; and an outlet opening for the cooling air from the cooling air channel via which the cooling air is conducted to the burner for combustion purposes 50, whereby between the cooling air inlet orifice and the outlet opening the majority of the surface of the housing is cooled by convection by the cooling air stream; wherein the housing has stiffening ribs 48 on its surface; in the area of the burner the housing has a device for insertion of the burner; the housing is interlocked with the wall structure at the area of the hot gas outlet orifice. The housing is split in a maximum of one sectional plane allows for there to be zero sectional planes, i.e. no split.

10. Claims 25, 30, 34, 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Eriksson et al (4,362,500). Erickson et al teach a combustion chamber comprising: an outer wall structure 6 surrounding an internal area; a cooling air inlet orifice in 12 arranged on the outer wall structure for cooling air near a hot gas outlet orifice, the cooling air inlet orifice opening into a cooling air channel 7; a burner 11 projecting into the internal area; a housing 5 extending from the burner to the hot gas outlet orifice; an inner wall offset from the outer wall structure 6, the inner wall formed by a surface of the housing and cooled by convection by an air stream flowing between the outer wall structure and the inner wall, the air stream being conducted in a closed cooling air channel 7; and an outlet opening 10 for the cooling air from the cooling air channel via which the cooling air is conducted to the burner for combustion purposes, whereby

between the cooling air inlet orifice and the outlet opening the majority of the surface of the housing is cooled by convection by the cooling air stream; in the area of the burner the housing has a device for insertion of the burner. The housing and wall has bolts/suspension device 16 for mounting the two and which inherently permit at least some movement in both the axial and radial direction. The housing is split in a maximum of one sectional plane allows for there to be zero sectional planes, i.e. no split.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 896193. EP '193 teaches various aspects of the prior art but does not specifically teach the housing is sheet metal having a wall thickness of between 3 and 10 mm. However, using sheet metal with this thickness is well known in the combustor art and it would have been obvious to employ as an obvious matter of using the conventional materials in the art and having the conventional ranges in the art.

13. Claims 26-28, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson (4,362,500) in view of optionally EP 896193. Erickson teaches various aspects of the prior art but does not specifically teach the housing is sheet metal having a wall

thickness of between 3 and 10 mm. However, using sheet metal with this thickness is well known in the combustor art and it would have been obvious to employ as an obvious matter of using the conventional materials in the art and having the conventional ranges in the art. Erickson does not teach stiffening ribs. EP '193 teaches stiffening ribs 48. It would have been obvious to one of ordinary skill in the art to employ stiffening ribs to strengthen the housing and/or to enhance the cooling of the housing.

14. Claims 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above prior art in view of any of WO 99/47874, DE 19751299 and Walz et al (6,085,515 or DE 19623300) and optionally Moore (5,326,206). The above applied prior teach various aspects of the claimed invention but do not teach the detailed structure of the suspension device. WO '874 teaches a the housing is suspended on the wall structure by a suspension device; the suspension device is formed by a plurality of fixing elements that are arranged around the perimeter of the housing and connected to the wall structure under tension; the fixing elements are spring mounted 15 at the end adjoining the wall structure; wherein the suspension device is designed such that the suspended housing can move both axially and radially with respect to an axis running in a lengthwise direction of the combustion chamber. DE '299 teaches the housing is suspended on the wall structure by a suspension device; the suspension device is formed by a plurality of fixing elements 16 that are arranged around the perimeter of the housing and connected to the wall structure under tension; the fixing elements are spring mounted 42 at the end adjoining the wall structure 7; wherein the suspension device is designed such that the suspended

housing can move both axially and radially with respect to an axis running in a lengthwise direction of the combustion chamber. Walz et al teach the housing is suspended on the wall structure by a suspension device; the suspension device is formed by a plurality of fixing elements that are arranged around the perimeter of the housing and connected to the wall structure under tension; the fixing elements are spring mounted 13 at the end adjoining the wall structure; wherein the suspension device is designed such that the suspended housing can move both axially and radially with respect to an axis running in a lengthwise direction of the combustion chamber; wherein the fixing elements comprise bolts 4, each of which have at a first end an essentially hemispherical bolt head 6 that is seated so as to allow tilting in a recess in a bolt holder mounted on the housing end, said recess being essentially hemispherical in cross-sectional view (near 5); the second end of each bolt is fed through a guide hole in the wall structure and through a compression spring 13 on the outer side of the wall structure, the compression spring being compressed against the outer side of the wall structure by means of a washer 14 held at the second end of the bolt. Walz et al appear to teach hemispherical bolt head the other applied references do not teach a hemispherical bolt head and matching hemispherical surface. Moore teaches that a hemispherical bolt head 29 facilitates a self adjusting load surface (col. 5, lines 19+). It would have been obvious to one of ordinary skill in the art to employ a hemispherical bolt head and matching hemispherical surface, in order to employ a self adjusting load surface.


Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ted Kim whose telephone number is 571-272-4829. The Examiner can be reached on regular business hours before 5:00 pm, Monday to Thursday and every other Friday.

The fax numbers for the organization where this application is assigned are 571-273-8300 for Regular faxes and 571-273-8300 for After Final faxes.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe, can be reached at 571-272-4444.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist of Technology Center 3700, whose telephone number is 703-308-0861. General inquiries can also be directed to the Patents Assistance Center whose telephone number is 800-786-9199. Furthermore, a variety of online resources are available at <http://www.uspto.gov/main/patents.htm>

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